



SHELTER HOUSE FOR AQUAPONICS SYSTEM

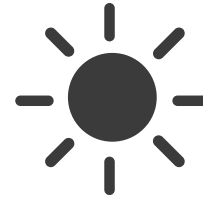
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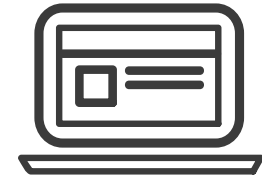
Marketing



Project
Managment



Sustainability
and ethics

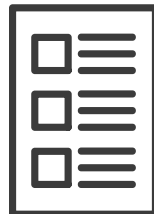


Arquitecture

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Electronics



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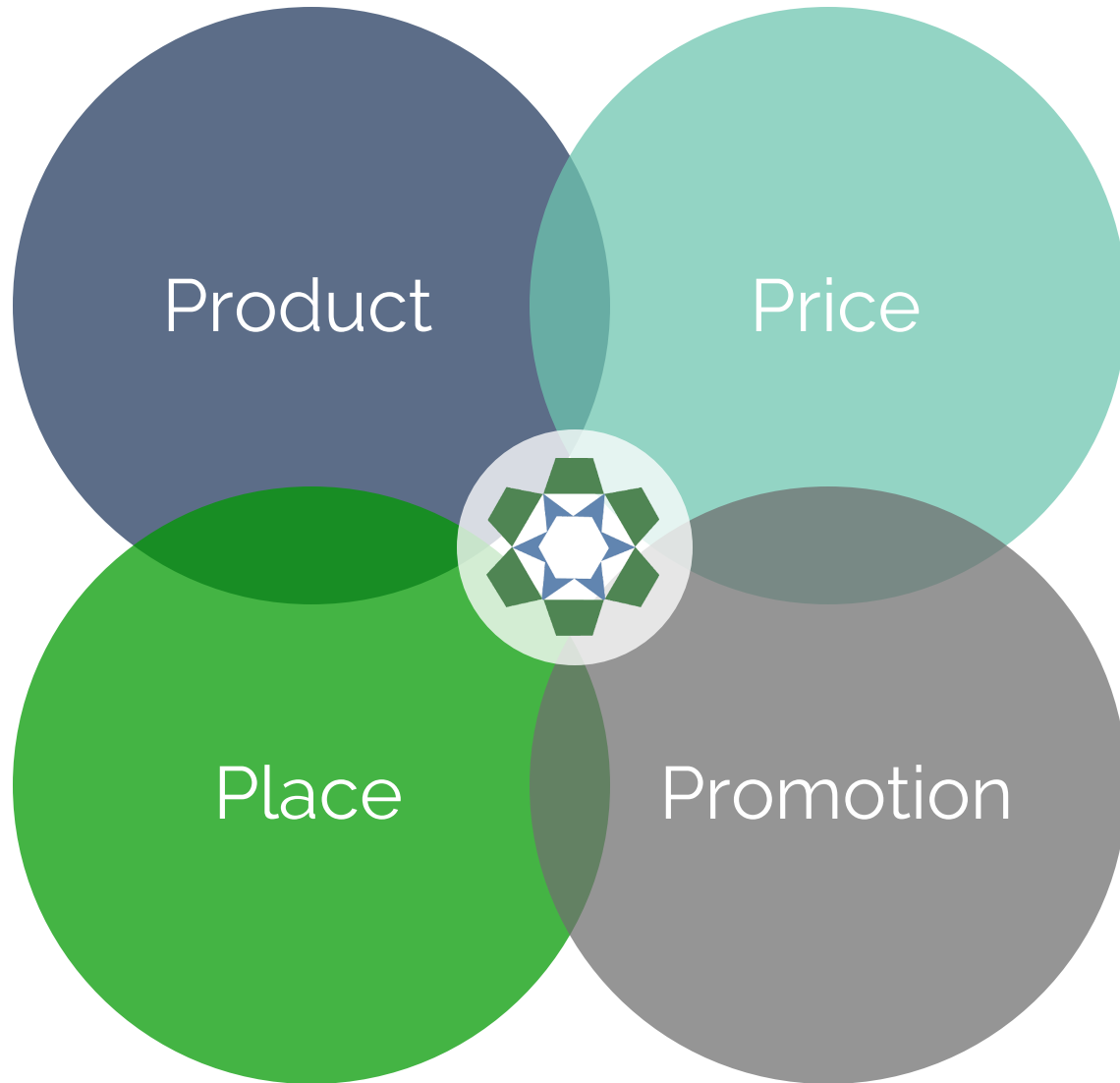
INTRODUCTION

Build a shelter for an aquaponic system

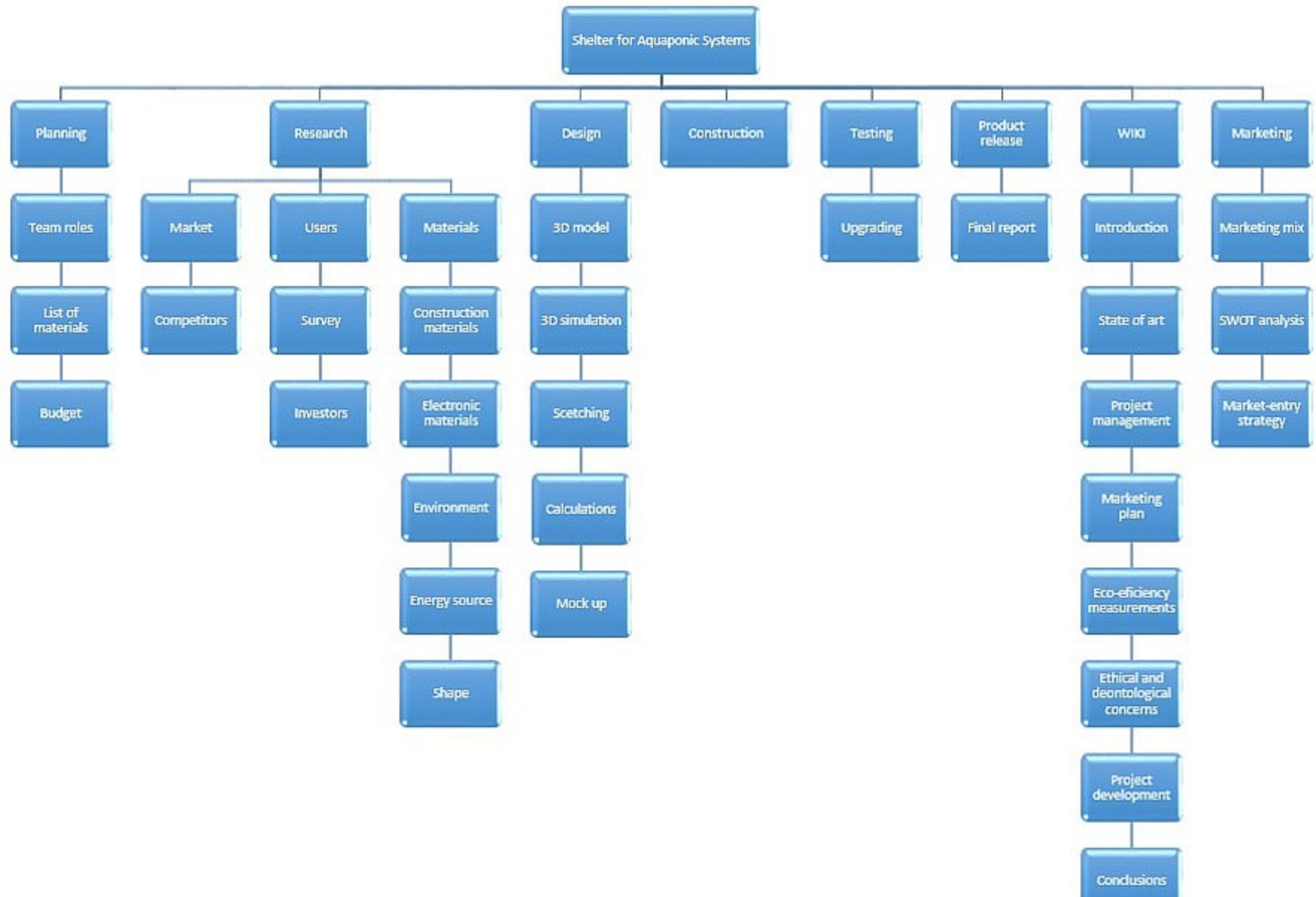
Greenhouse that looks good in a urban environment

Protect/support the aquaponic system

MARKETING



PROJECT MANAGMENT



PROJECT MANAGMENT



Arduino Uno	22,90€
DHT22 sensor	9,90€
LCD keypad shield	14,50€
Power supply	7,50€
Wires	4,20€
Polycarbonate	0,00€
Double side tape	23,16€
Allplast glue	8,74€
Expanded PVC	0,00€

TOTAL	90,90€
Budget	150€
Rest	59,1€

*Cost of people were neglected because we are rewarded with grades, not money.



During all duration of the project we did not exceed non of deadlines



Expanded PVC instead of wood

Bigger size

SUSTAINABILITY

Economic

Affordable materials
Money saving

Social

Independency
Availability

Enviromental

Eco-friendly materials
Air&water pollution
Energy effiience
Not using chemicals

ETHICS

Safety and health

Sales and Marketing

Enviromental

ARCHITECTURE

Pinewood
PC



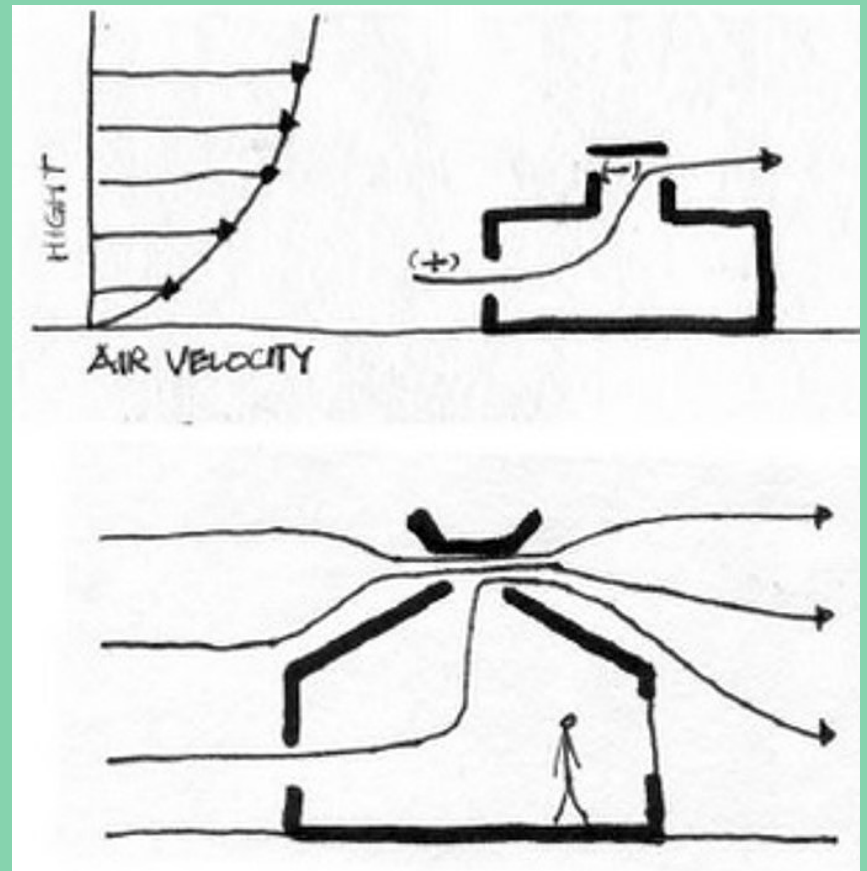
ELECTRONICS

Temperature and humidity

Arduino Uno
LCD keypad shield
DHT22 sensor



Ventilation



TEST AND RESULTS

1



TEMPERATURE
AND HUMIDITY

2



LIGHT

3



WINDOW I

4



WINDOW II

FUTURE DEVELOPMENT

Make it more user-friendly

Customize the size

Ability to disassemble

Customize the structure material

Thermal mass heating system

Sun protection system

Fully-automated windows opening system

CONCLUSIONS



Eco-lifestyle
contribution



Knowledge on
organic food
product



Cooperation
skills



Low-cost
product



Engineer
experience

VIDEO



An aerial, grayscale photograph of a modern architectural complex. The building features multiple interconnected rectangular volumes with flat roofs, some of which are landscaped with low-lying vegetation. Large, dark-framed windows are visible on the exterior walls. In the center of the complex, a prominent geodesic dome structure sits atop one of the buildings. The surrounding area includes a paved walkway and some trees. The overall aesthetic is clean and contemporary.

THANKS FOR YOUR
ATTENTION

DO YOU HAVE ANY
QUESTIONS?